ENVIRONMENTAL ASSESSMENT

Case File No.: AA-18960

AK-040-03-EA-031

Type of Action: Cache Creek Solid Mine Waste Removal Action

Location: Upper Cache Creek, Yentna Mining District, Alaska, Section 2, T. 28 N., R. 9 W., Seward Meridian

Applicant: Bureau of Land Management
Anchorage Field Office

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I. INTRODUCTION

The Sunshine #1 and #2 placer mining claims are located on upper Cache Creek, within the Yentna Mining District. The town of Trapper Creek is approximately 40 miles east of the subject lands. The claims can be accessed during the summer months by 4-wheel drive vehicle from Anchorage via the Parks Highway. To reach the site from the Parks Highway, first turn west at the town of Trappers Creek onto the Petersville Road. After driving approximately 40 miles, turn upstream to the north after reaching Cache Creek (first major creek crossing), and follow a very rough road which is paralleling, and in some sections contained within the creek channel. The site is inaccessible when the creek is at high flow levels. The subject mining claims are located near the top of the drainage.

The case file numbers for Sunshine #1 and #2 are AA-18960 and AA-18961. A Tentative Approval (TA #AA-6909), which transferred management to the State, was issued August 19, 1987. All the lands within T. 28 N., R 9 W. were Tentatively Approved except mining claims AA-18960 and AA-18961 and other specific mining claims. Since the lands were excluded in the TA, the lands are still under BLM management but are top filed by the State of Alaska.

Placer mining began on Cache Creek in 1913, and has been occurring in different parts of the drainage on a fairly continuous basis ever since. The claims have probably been mined several times over the years, although BLM did not start tracking operators until 1980. A mining notice was first filed on the Sunshine #1 and #2 mining claims with BLM in 1984, by Steven Sneed for the Eclipse Mining Company. The claimants were Steven Sneed, Sarah Ann Sneed, Gene Sneed, and EA Sneed. In August 1986, Mr. Randy Brown allegedly purchased the claims from the Sneeds and became the mine operator. However, the Sneeds remained as claimants of record, along with Mr. Brown. The last year mining occurred was 1987, with Mr. Brown as the operator. The subject claims were determined abandoned and void in a decision issued on April 9, 1992.

Several attempts were made to have the former claimants cleanup the site, most recently in a letter sent to Randy Brown in 1996. A noncompliance notice was issued to Mr. Brown from BLM on October 5, 1994, for failure to complete the necessary reclamation. On at least two occasions Mr. Brown assured BLM that he would reclaim the site, but no reclamation occurred. In 1999, BLM performed a site investigation of the subject claims for the Abandoned Mine Lands (AML) program. Solid and potentially hazardous waste was inventoried and photographed during the site investigation. A hazardous waste removal of lead acid batteries and waste engine oil was conducted by BLM in 2000. Utilizing BLM's hazmat contract, all waste considered hazardous was removed or recycled at authorized disposal sites.

In August 2003, the Alaska State Division of Mining approached BLM with a proposal to remove the remaining solid waste off the site. The State is proposing cleaning up solid waste on several nearby State mining claims. They are soliciting bids from local miners to do the work under a State contract. They are willing to include the cleanup of the Sunshine #1 and #2 mining claims with the rest of the cleanup work.

A. Purpose and Need for the Proposed Action:

The Sunshine #1 and #2 mining claims are on a parcel of BLM land selected by the State of Alaska. The State will not accept this parcel until the mine is cleaned up and the land restored to an acceptable condition. Work outlined in the Proposed Action, including the removal of buildings, heavy equipment, and assorted solid waste, should restore the lands to a condition acceptable for conveyance.

B. Conformance With Land Use Plan:

The lands are within the boundary of the Alaska Southcentral Planning Area Management Framework Plan (MFP), dated March 1980. The Proposed Action is covered under the Watershed (W-1) Activity Objective of the MFP which states that BLM is to "maintain water quality in accordance with the Alaska Water Quality Standards". The Proposed Action is also covered under the Visual Resources (VR-3) Activity Objective which states that “BLM rehabilitate cultural modifications to a point at which they will meet the scenery quality of the surrounding landscape.”

II. PROPOSED ACTION AND ALTERNATIVES

A. Proposed Action:

BLM is proposing to remove solid waste from the abandoned Sunshine #1 and #2 placer mining claims, Section 2, T. 28 N., R. 9 W., Seward Meridian (see attached map), under a contract to be administered by the State of Alaska. BLM plans to dispose of a large Quonset structure, a large trailer, several assorted pieces of heavy equipment, two junked vehicles, and assorted solid waste.

Solid waste materials will be removed from the site and placed within a centralized DEC approved landfill in the local area (on State lands), and covered with a minimum of six inches of clean fill on top. Solid waste from several State managed abandoned mine operations would be included. No hazardous waste would be included in the landfill. Some material, at the discretion of the selected contractor, would be removed and sold for salvage.

All work areas in this project are on previously disturbed former mining operation areas. The vegetation was stripped during past mining, and very spotty revegetation has occurred on the claims. The State of Alaska will plan,

administer the contract and monitor the removal operation at the site according to all federal and state environmental and safety regulations. Removal of waste materials is anticipated to begin in September 2003 (weather and scheduling permitting).

B. Alternative #1 - On Site Disposal:

Under this alternative, the material would be disposed of in a DEC approved landfill onsite, rather than offsite on State lands. Otherwise, the proposal is the same as the Proposed Action. A large trench would be dug by a bulldozer at a site up on the bench, well away from the stream channel, probably against the toe of the canyon slope on the west side of the subject lands. This would place the trench as high and far from the active flood plain as possible. The exact location of the trench would be determined jointly by representatives of the State and the BLM after consulting with the selected contractor. The material would be pushed into the trench, flattened by the bulldozer, and then covered with a minimum of six inches of clean fill on top. Because of the large quantities of solid waste involved, the trench is anticipated to be over 100 feet in length, 15 feet wide, and about 8 feet in depth. The exact dimensions of the trench will not be able to be determined until the waste material is flattened and compacted. Some material, at the discretion of the selected contractor, would be removed and sold for salvage.

C. Alternative #2 - No Action:

Under the No Action Alternative, the BLM will continue to implement current management practices. There would be no further investigation or cleanup actions implemented onsite.

III. AFFECTED ENVIRONMENT

A. Critical Elements:

The following critical elements are either not present or would not be affected by the Proposed Action or the Alternatives:

Air Quality
Areas of Critical Environmental Concern
Environmental Justice
Farm Lands, Prime or Unique
Floodplains
Invasive, Non-native Species
Native American Religious Concerns
Wild and Scenic Rivers
Wilderness

1. Cultural Resources:
The Anchorage Field Office's (AFO) Cultural Resource specialist completed a review on September 2, 2003 (see attached). No cultural resources were identified as being impacted.

2. Subsistence:
Subsistence resources consist of a wide variety of wildlife and selective vegetation. A subsistence clearance report was submitted on August 28, 2003 (see attached).

3. T&E Species:
A Threatened and Endangered Species Evaluation, for wildlife and vegetation, was submitted on September 2, 2003 (see attached).

The following critical elements will be affected by either the Proposed Action or Alternatives:

4. Wastes, Hazardous or Solid:
No known hazardous materials remain on the site. A large quantity of assorted solid waste does presently remain.

5. Water Quality, Surface and Ground:
Surface and ground water at the abandoned mine site are not used for drinking. Due to extensive past mining, water in the area is generally considered to be of potentially degraded quality.

6. Wetlands and Riparian Zones
Wetlands and riparian zones have been extensively disturbed and degraded by past mining activities. Due to the lack of mining reclamation the site remains severely degraded with little reestablishment of wetlands or riparian vegetation. During past mining the stream was moved to the east side of the valley. The stream has since down-cut into the valley floor.

B. Land Status:
This site is located on lands validly selected by the State of Alaska, therefore the land is not Federal Public Land as defined in Section 102 (3) of the Alaska National Interests Lands Conservation Act (ANILCA). The State has refused to take ownership of the subject mining claims due to the environmental liabilities associated with the site. Once remediation issues have been resolved, the lands should be acceptable to the State and will probably be conveyed.

C. Soils:
The valley floor substrate and cleanup site are placer mine tailings consisting of washed gravels with little to no remaining soil material. The sides of the valley consist of colluvial soils that have slumped off from the upper bench above the cleanup site.

D. Vegetation:
Much of the area is dominated by willow, spruce, alder, birch and poplar. Balsam, cottonwood, various local plants and moss can be found around the mine. Very little vegetation is present on the valley floor of the site due to a lack of soil cover from past mining.

E. Visual Resources:
The visual appearance of the subject abandoned mining claims are severely degraded due to the lack of reclamation from past mining activities. Unreclaimed tailings, deteriorated structures, equipment and various types of solid waste litter the local landscape creating an eyesore to visitors.

F. Wildlife:
Moderate to low densities of moose occur in the areas associated with willow shrubs and mixed forest. Predators such as wolves, black and brown bear, lynx and marten may frequent the area, but are highly mobile and would only be present for short periods of time. Resident and migrant land birds nest and feed in surrounding shrub (alder and willow) and forest habitats.

IV ENVIRONMENTAL CONSEQUENCES

A. Impacts of the Proposed Action:

1. Critical elements:

a. Wastes, Hazardous or Solid:
By removing the solid waste materials from the site, potential future ground and surficial water contamination will be avoided and the materials will be properly disposed of under IAW Federal and State laws and regulations.

b. Water Quality, Surface and Ground:
Removal of the waste materials will preclude future opportunities for leaching of substances into the surface and ground waters. Removal of the waste materials could improve surface and ground water quality.

c. Wetlands and Riparian Zones
No wetlands would be affected by the Proposed Action.

Some disturbance of newly reestablished riparian vegetation would be necessary.

2. Soils:
Removal of the solid waste materials will improve overall soil/gravel conditions. The soil surface will be free of refuse that would eventually degrade and become an unwanted part of the soil profile.

3. Vegetation:
Some riparian vegetation will be removed or disturbed.

4. Visual Resources:
The Proposed Action would improve the visual appearance of the area which has been severely degraded by unreclaimed tailings and abandoned solid waste from past mining.

5. Wildlife:
The noise associated with heavy equipment use will temporarily displace wildlife from nearby, unaffected shrub and forest areas. Displaced animals may be more vulnerable to predators and may cause breeding birds to abandon nests and breeding territories, increasing mortality.

B. Impacts of Alternative #1 - On Site Disposal:

1. Critical elements:

a. Wastes, Hazardous or Solid:
Creating a State permitted solid waste landfill on-site will constitute proper disposal of the waste materials. However, it is reasonable to expect the solid waste disposal permit issued by the ADEC will include some provision for periodic monitoring.

b. Water Quality, Surface and Ground:
Removal and burial of the waste materials will minimize future opportunities for leaching of substances into the surface and ground waters by placing the materials well above the water table and out of the flood plain. Removal of the waste materials out of the flood plain will improve downstream surface and ground water quality.

c. Wetlands and Riparian Zones:
No wetlands would be affected by Alternative #1.

Some disturbance of newly reestablished riparian vegetation would be necessary.

2. Soils:
Burial of the solid waste materials will improve overall soil/gravel conditions. If the waste materials were to remain present, so would the potential for contamination.

3. Vegetation:
Some vegetation will be removed or disturbed when digging the trench and moving the solid waste.

4. Visual Resources:
The Proposed Action would improve the visual appearance of the area which has been severely degraded by unreclaimed tailings and abandoned solid waste from past mining.

5. Wildlife:
The noise associated with heavy equipment use will temporarily displace wildlife from nearby, unaffected shrub and forest areas. There will up to one day more noise and activity for this Alternative than the Proposed Action. Displaced animals may be more vulnerable to predators and may cause breeding birds to abandon nests and breeding territories, increasing mortality.

C. Impacts of Alternative #2 – No Action:

1. Critical Elements:

a. Wastes, Hazardous or Solid:
The State of Alaska will not accept conveyance and the site will continue to be out of compliance with the State of Alaska's solid waste disposal regulations (18 AAC 60). The solid waste materials will continue to deteriorate and potentially release contaminates to the soils/gravel, surface and ground water. The volume of solid waste at the site could increase as persons who reside or work in the local area may begin to dispose of their wastes at the site. The site may become contaminated with oil and/or hazardous substances as a convenient dumping ground and recreational shooting gallery.

b. Water Quality, Surface and Ground:
Surficial and ground water contamination could occur if the waste is left in place. Waste material could end up in the stream channel, where it could be moved downstream affecting downstream lands.

c. Wetlands and Riparian Zones:
No wetlands or riparian zones would be affected by Alternative #2.

2. Soils:
The No Action Alternative, which involves leaving solid wastes on land that contains washed gravel tailings, would increase the likelihood of site contamination.

3. Vegetation:
Potential for bioaccumulation of metals and toxins in plants could occur if this waste is left unattended to migrate into the water and soils/gravels.

4. Visual Resources:
The site would remain in a degraded state and an eyesore to visitors to the area. The site could become a magnet for midnight dumping of waste from other sites.

5. Wildlife:
Potential for bioaccumulation of metals and toxins in wildlife could occur if these wastes are left unattended to migrate into the water and soils/gravels. Exposed, solid waste materials at the mine could enter the food chain via indirect consumption by animals.

C. Cumulative Impacts:
No residual or cumulative impacts are expected to be incurred by the implementation of the Proposed Action or Alternative #1. Bioaccumulation of wastes in plants and animal life may occur as a result of Alternative #2.

D. Mitigation Measures:
Mitigation measures would be developed by the State of Alaska. The work would occur under a State managed contract, under State issued permits.

V. CONSULTATION AND COORDINATION

A. Persons and Agencies Consulted:

Kerwin Krause- Geologist, Alaska Department of Natural Resources, Division of Mining, Lands and Water

B. List of Preparers:

Carl Persson - Geologist, Lead Preparer
Donna Redding - Archaeologist
Jake Schlapfer - Recreational Planner
Bruce Seppi - Wildlife Biologist
Debbie Blank - Botanist
Jeff Denton - Subsistence Specialist/Biologist
Larry Beck - Environmental Specialist